

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)**

No. 2021/Track-III/TK/12

New Delhi, Dtd. 16.06.2024

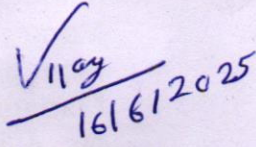
**Addressed to:
As per list attached.**

Sub: Correction Slip No. 6 to Indian Railway Track Machine Manual (IRTMM-2019).

The Ministry of Railways (Railway Board) have decided to make correction/addition/deletion as indicated in the enclosed Correction Slip No. 6 to relevant para/annexures of Indian Railway Track Machine Manual-2019.

This has the approval of Additional Member, Civil Engineering (AM/CE).

Encl.: as above


(Vijay Singh)
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Railway Board
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List

The General Managers (Engg.)- CR, ER, ECR, ECoR, NR, NCR, NER, NFR, NWR, SR, SCR, SECR, SER, SWR, WCR, WR and Metro Railway/Kolkata.

The General Manager (Const.), N.F. Railway, Guwahati.

The CAO/Const. All Indian Railways.

PFA All Indian Railways.

The General Managers (Engg.) – ICF/Chennai, RCF/Kapurthala, DLW/Varanasi, CLW/Chittranjan, W&AP/Yelahanka, Bangalore & DMW/Patiala, MCF/Rai Bareilly, CORE/PRYJ

The Director General (Track), RDSO/Alambagh, Lucknow.

Chief Commissioner of Railways Safety, Lucknow.

Managing Director, IRCON, New Delhi.

Managing Director, RITES, New Delhi.

Managing Director, DMRC, Metro Bhawan, Barakhamba Lane, New Delhi.

Managing Director, CONCOR, New Delhi

Managing Director, RVNL, August Kranti Bhawan, Bhikaji Cama Place, New Delhi.

Managing Director, DFCCIL, Pragati Maidan, Metro Station, New Delhi.

Managing Director, PIPAVAV Railway Corp. Ltd., 1st Floor Jeevan Tara Building, Gate No. 4, Parliament Street, New Delhi.

Managing Director, MRVC, Church Gate, Station Building 2nd Floor, Mumbai - 400020

Managing Director, RLDA, IRCON Office Compound, Next to Safdarjung Rly. Station, Motibagh-I, New Delhi.

Managing Director, Konkan Railway Corporation Ltd., Belapur Bhawan, Sector-11, CBD Belapur, Mumbai, Pin- 400614.

The Chief Project Officer, DMRC, Pragati Vihar, New Delhi.

Director General, IRICEN, Pune.

Director General, IRIEEN, Nasik.

Director General, IRISSET, Secunderabad.

Director General, IRIMEE, Jamalpur.

Director General, IRITM, Vill. Kanausi, Hardoi, Manik Nagar, Lucknow.

Director General, Railway Staff College, Vadodara.

Genl. Secretaries, AIRF, NFIR, IRPOF, FROA, AIRPFA, DAI (Railways) Rail Bhawan, New Delhi.

Copy to:

PPS to, Chairman & CEO, Member (Fin), Member (Infra), Member (T&RS), Member (O&BD) and Secretary.

PPS/PS to AM(CE), AM (Works), AM (PL), AM (F), AM (T), AM(Staff).
AM(L&A), PED (Infra), PED(Bridge), PED(Vig)

EDTK (M&MC), EDCE (G), EDCE (P), EDCE (B&S) ED (W), ED(Plg), ED(WP), ED(INF), ED(L&A), ED(PSU), EDVE,

Addendum and Corrigendum Slip to Indian Railways Track Machine Manual, 2019

1. Para 606 (1) shall be replaced by new para 606 (1) as under :

- (1) Track machines are deployed for variety of track works and their proper utilization has to be ensured by making available minimum duration of blocks for smooth, safe and effective working. Minimum duration of block is fixed based on setting up/winding up time, ineffective time and progress per effective hour. Minimum block duration etc. for different types of machines is given in table below:

Machine Type	Minimum Block in Hour (min)	Ineffective time in hour (minute)	Output / effective Hour
DUO	2.50 (150 min)	0.50 (30 min)	800 m
CSM	2.50 (150 min)	0.50 (30 min)	1200 m
TEX- DYNAMIIC	2.50 (150 min)	0.50 (30 min)	1600 m
UNIMAT	2.50* (150 min)	0.50 (30 min)	1 turnout
MPT	2.50* (150 min)	0.50 (30 min)	1000 PRC/ 1 turnout
DTS	2.50* (150 min)	0.50 (30 min)	2500 m
PCCM	3.00 (180 min)	1.25 (75 min)	1 turnout per 1.75 Hr.
BCM(Plain)	3.00 (180 min)	1.00 (60 min)	200 m
BCM (P&C)	4.50 (270 min)	3.00 (180 min) #	One turnout track
HOBCM	4.00 (240 min)	1.33 (80 min)	350 m
SBCM	2.50 (150 min)	0.50 (30 min)	400 m
BRM	2.50 (150 min)	0.33 (20 min)	1500 m
TLE	3.00 (180 min)	0.75 (45 min)	200 m
TRT	4.00 (240 min)	1.25 (75 min)	400 m
RGM (72 stone)	4.00 (240 min) ^{\$\$}	0.33 (20 min)	12-15** km
RGM(96 stone)	4.00 (240 min) ^{\$\$}	0.33 (20 min)	15-18** km
SRGM	4.00 (240 min) ^{\$\$}	0.50 (30 min)	2 Turnout/3 km
RIV	2.50 (150 min)	0.50 (30 min)	40-50 km
RMM	4.00 (240 min) ^{\$\$}	0.75 (45 min)	0.7-1.5 km

- *Time for turnout is for main line & turnout side and connection and disconnection time required for S&T.
- **Depending on the length on curves in the section.
- # For deep screening of P&C, ineffective time includes movement, preparatory works and S&T works.
- \$\$ If one block of 4 hrs block is not possible then two blocks of 2.5 hrs / four blocks of 1.5 hrs to be provided.
- Output may vary depending upon the age of the machine and track features.
- For output less than 90% of the normal output, the reason should be analysed and corrective action taken, if any
- MPT is used for spot attention of both plain track and Points and Crossing, hence requirement will vary depending on work to be performed.
- Ineffective time may increase while machine will work in group.

2. In Annexure 8.4, III. Miscellaneous shall be read as V. Miscellaneous.

3. SN 2, POH & Repair shed Working Tools & SN 3,9,14 of Para (B)V. Miscellaneous of annexure 8.4 shall be modified as under:

SN	Description of items	For POH capacity of 50TMUs per annum	For POH capacity of 24TMUs per annum	IOH shed/ZMD	Satellite Depot
2	<u>POH & Repair shed</u> : Each shed to have two EOT cranes of 10 Ton capacity each with EPU (epoxy polyurethane) flooring, inspection pits and grided base. Galvanised Aluminium / Aluminium sheet with thermal insulation layer and natural drift exhaust system which will have 10-15% translucent sheets in the roof shall be provided. Pneumatic circuits with tapping arrangements at required locations shall be provided.	3 Sheds of 100mX20m with 2 lines in each shed.	2 Sheds of 100mX20m with 2 lines in each shed.	1 Sheds of 100mX20m with 2 lines	1 shed of 100m x 20m with 2 lines
V. Miscellaneous					
(3)	CC TV with camera web based covering complete shed & store	1 Set	1 Set	1 Set	1 Set
(9)	Light weight Collapsible Ladder with working platform (up to 10 m Max. height)	1 Set	1 Set	1 Set	1 Set
(14)	Firefighting system	1 Set	1 Set	1 Set	1 Set

Existing and Proposed Stipulations in Juxtaposition

S.N.	Para	Existing provisions of IRPWM	Proposed provisions																																																																																																																
1.	606 (1)	<p>(1) Track machines are deployed for variety of track works and their proper utilization has to be ensured by making available minimum duration of blocks for smooth, safe and effective working. Minimum duration of block is fixed based on setting up/winding up time, ineffective time and progress per effective hour. Minimum block duration etc. for different types of machines is given in table below:</p> <table> <tr> <th>M/c Type</th><th>Minimum Block (hr.) (min)</th><th>Ineffective time (hr.) (min)</th><th>Output / eff. Hr.</th></tr> <tr><td>DUO</td><td>2.50 (150 min)</td><td>0.50 (30 min)</td><td>800 m</td></tr> <tr><td>CSM</td><td>2.50 (150 min)</td><td>0.50 (30 min)</td><td>1200 m</td></tr> <tr><td>TEX- DYNAMIIC</td><td>2.50 (150 min)</td><td>0.50 (30 min)</td><td>1600 m</td></tr> <tr><td>UNIMAT</td><td>2.50* (150 min)</td><td>0.50 (30 min)</td><td>1 turnout</td></tr> <tr><td>MPT</td><td>2.50* (150 min)</td><td>0.50 (30 min)</td><td>1000 PRC/ 1 turnout</td></tr> <tr><td>DTS</td><td>2.50* (150 min)</td><td>0.50 (30 min)</td><td>2500 m</td></tr> <tr><td>PCCM</td><td>3.00 (180 min)</td><td>1.25(75 min)</td><td>1 turnout per 1.75 Hr.</td></tr> <tr><td>BCM(Plain)</td><td>3.00 (180 min)</td><td>1.00 (60 min)</td><td>200 m</td></tr> <tr><td>BCM (P&C)</td><td>4.50 (270 min)</td><td>3.00 (180 min) #</td><td>One turnout =750 m</td></tr> <tr><td>HOBCM</td><td>4.00 (240 min)</td><td>1.33 (80 min)</td><td>350 m</td></tr> <tr><td>SBCM</td><td>2.30 (150 min)</td><td>0.50 (30 min)</td><td>400 m</td></tr> <tr><td>TLE</td><td>3.00 (180 min)</td><td>0.75 (45 min)</td><td>200 m</td></tr> <tr><td>TRT</td><td>4.00 (240 min)</td><td>1.25 (75 min)</td><td>400 m</td></tr> </table>	M/c Type	Minimum Block (hr.) (min)	Ineffective time (hr.) (min)	Output / eff. Hr.	DUO	2.50 (150 min)	0.50 (30 min)	800 m	CSM	2.50 (150 min)	0.50 (30 min)	1200 m	TEX- DYNAMIIC	2.50 (150 min)	0.50 (30 min)	1600 m	UNIMAT	2.50* (150 min)	0.50 (30 min)	1 turnout	MPT	2.50* (150 min)	0.50 (30 min)	1000 PRC/ 1 turnout	DTS	2.50* (150 min)	0.50 (30 min)	2500 m	PCCM	3.00 (180 min)	1.25(75 min)	1 turnout per 1.75 Hr.	BCM(Plain)	3.00 (180 min)	1.00 (60 min)	200 m	BCM (P&C)	4.50 (270 min)	3.00 (180 min) #	One turnout =750 m	HOBCM	4.00 (240 min)	1.33 (80 min)	350 m	SBCM	2.30 (150 min)	0.50 (30 min)	400 m	TLE	3.00 (180 min)	0.75 (45 min)	200 m	TRT	4.00 (240 min)	1.25 (75 min)	400 m	<p>(2) Track machines are deployed for variety of track works and their proper utilization has to be ensured by making available minimum duration of blocks for smooth, safe and effective working. Minimum duration of block is fixed based on setting up/winding up time, ineffective time and progress per effective hour. Minimum block duration etc. for different types of machines is given in table below:</p> <table> <tr> <th>Machine Type</th><th>Minimum Block in Hour (min)</th><th>Ineffective time in hour (minute)</th><th>Output / effective Hour</th></tr> <tr><td>DUO</td><td>2.50 (150 min)</td><td>0.50 (30 min)</td><td>800 m</td></tr> <tr><td>CSM</td><td>2.50 (150 min)</td><td>0.50 (30 min)</td><td>1200 m</td></tr> <tr><td>TEX- DYNAMIIC</td><td>2.50 (150 min)</td><td>0.50 (30 min)</td><td>1600 m</td></tr> <tr><td>UNIMAT</td><td>2.50* (150 min)</td><td>0.50 (30 min)</td><td>1 turnout</td></tr> <tr><td>MPT</td><td>2.50* (150 min)</td><td>0.50 (30 min)</td><td>1000 PRC/ 1 turnout</td></tr> <tr><td>DTS</td><td>2.50* (150 min)</td><td>0.50 (30 min)</td><td>2500 m</td></tr> <tr><td>PCCM</td><td>3.00 (180 min)</td><td>1.25(75 min)</td><td>1 turnout per 1.75 Hr. min)</td></tr> <tr><td>BCM(Plain)</td><td>3.00 (180 min)</td><td>1.00 (60 min)</td><td>200 m</td></tr> <tr><td>BCM (P&C)</td><td>4.50 (270 min)</td><td>3.00 (180 min) #</td><td>One turnout track</td></tr> <tr><td>HOBCM</td><td>4.00 (240 min)</td><td>1.33 (80 min)</td><td>350 m</td></tr> <tr><td>SBCM</td><td>2.50 (150 min)</td><td>0.50 (30 min)</td><td>400 m</td></tr> <tr><td>BRM</td><td>2.50 (150 min)</td><td>0.33 (20 min)</td><td>1500 m</td></tr> <tr><td>TLE</td><td>3.00 (180 min)</td><td>0.75 (45 min)</td><td>200 m</td></tr> </table>	Machine Type	Minimum Block in Hour (min)	Ineffective time in hour (minute)	Output / effective Hour	DUO	2.50 (150 min)	0.50 (30 min)	800 m	CSM	2.50 (150 min)	0.50 (30 min)	1200 m	TEX- DYNAMIIC	2.50 (150 min)	0.50 (30 min)	1600 m	UNIMAT	2.50* (150 min)	0.50 (30 min)	1 turnout	MPT	2.50* (150 min)	0.50 (30 min)	1000 PRC/ 1 turnout	DTS	2.50* (150 min)	0.50 (30 min)	2500 m	PCCM	3.00 (180 min)	1.25(75 min)	1 turnout per 1.75 Hr. min)	BCM(Plain)	3.00 (180 min)	1.00 (60 min)	200 m	BCM (P&C)	4.50 (270 min)	3.00 (180 min) #	One turnout track	HOBCM	4.00 (240 min)	1.33 (80 min)	350 m	SBCM	2.50 (150 min)	0.50 (30 min)	400 m	BRM	2.50 (150 min)	0.33 (20 min)	1500 m	TLE	3.00 (180 min)	0.75 (45 min)	200 m
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RGM (72 stone)	4.00 (240 min) ^{\$\$}	0.75 (45 min)	12-15** km
RGM(96 stone)	4.00 (240 min) ^{\$\$}	0.75 (45 min)	15-18** km
SRGM	4.00 (240 min) ^{\$\$}	0.75 (45 min)	2 Turnout/3 km
RIV	2.50 (150 min)	0.50 (30 min)	40-50 km
RMM	4.00 (240 min) ^{\$\$}	0.75 (45 min)	0.7-1.5 km

- *Time for turnout is for main line & turnout side and connection and disconnection time required for S&T
- **Depending on the length on curves in the section
- # For deep screening of P&C, ineffective time includes movement, preparatory works and S&T works
- \$\$ If one block of 4 hrs block is not possible then two blocks of 2.5 hrs / four blocks of 1.5 hrs to be provided.
- Output may vary depending upon the age of the machine and track features
- For output less than 90% of the normal output, the reason should be analyzed and corrective action taken, if any
- MPT is used for spot attention of both plain track and Points and Crossing, hence requirement will vary depending on work to be performed.

TRT	4.00 (240 min)	1.25 (75 min)	400 m
RGM (72 stone)	4.00 (240 min) ^{\$\$}	0.33 (20 min)	12-15** km
RGM(96 stone)	4.00 (240 min) ^{\$\$}	0.33 (20 min)	15-18** km
SRGM	4.00 (240 min) ^{\$\$}	0.50 (30 min)	2 Turnout/3 km
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RMM	4.00 (240 min) ^{\$\$}	0.75 (45 min)	0.7-1.5 km

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- MPT is used for spot attention of both plain track and Points and Crossing, hence requirement will vary depending on work to be performed.
- Ineffective time may increase while machine will work in group.

2. Annx 8.4	SN	Description of items	For POH capacity of 50TMUs per annum	For POH capacity of 24TMUs per annum	IOH shed/ZMD	Satellite Depot
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SN	Description of items	For POH capacity of 50TMUs per annum	For POH capacity of 24TMUs per annum	IOH shed/ZMD	Satellite Depot
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5	2	POH & Repair shed: Each shed to have two EOT cranes of 10 Ton capacity each with EPU (epoxy polyurethane) flooring, inspection pits and grilled base. Galvanised Aluminium /Aluminium sheet with thermal insulation layer and natural drift exhaust system which will have 10-15% translucent sheets in the roof shall be provided. Pneumatic circuits with tapping arrangements at required locations shall be provided.	3 Sheds of 100mX20m with 2 lines in each shed.	2 Sheds of 100mX20m with 2 lines in each shed.	1 Sheds of 100mX20m with 2 lines	1 shed of 50m length x20m width with 2 lines
	III. Miscellaneous					
	(3)	CC TV with camera web based covering complete shed & store	1 Set	1 Set	1 Set	-

2	POH & Repair shed: Each shed to have two EOT cranes of 10 Ton capacity each with EPU (epoxy polyurethane) flooring, inspection pits and grilled base. Galvanised Aluminium /Aluminium sheet with thermal insulation layer and natural drift exhaust system which will have 10-15% translucent sheets in the roof shall be provided. Pneumatic circuits with tapping arrangements at required locations shall be provided.	3 Sheds of 100mX20m with 2 lines in each shed.	2 Sheds of 100mX20m with 2 lines in each shed.	1 Sheds of 100mX20m with 2 lines	1 shed of 100m x 20m with 2 lines
V. Miscellaneous					
(3)	CC TV with camera web based covering complete shed & store	1 Set	1 Set	1 Set	1 Set



	(9)	Light weight Collapsible Ladder with working platform (up to 10 m Max. height)	1 Set	1 Set	1 Set	-		(9)	Light weight Collapsible Ladder with working platform (up to 10 m Max. height)	1 Set	1 Set	1 Set	1 Set
	(14)	Firefighting system	1 Set	1 Set	1 Set	-		(14)	Firefighting system	1 Set	1 Set	1 Set	1 Set